Fugitive
Cooling Tower

ATTACHMENT A

AGRIUM KNO FACILITY

CONTINUOUS RELEASE-EMERGENCY RESPONSE NOTIFICATION SYSTEM REPORT

Agrium Attachment TO LOT — ENV-07702
Kenai Nitrogen Operations

SECTION I: GENERAL INFORMATION	CR-ERNS Number: 44607
Date of Initial Release:	Date of Initial Call to NRC: 10/23/90

Type of Report: Indicate below the type of report you are submitting.

[ ] Initial Written Notification	[ ] First Anniversary Follow-up Report	[X] Written Notification of a Change to Initial Notification	[ ] Written Notification of a Change to Follow-up Report

Signed Statement: I certify that the hazardous substances releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge.

M. L. Nugent, Plant Manager
Name and Position

8/13/99
Date

M L Nugent
Signature

Part A. Facility or Vessel Information

Name of Facility or Vessel: Alaska Nitrogen Products LLC
Kenai Plant

Person in Charge of Facility or Vessel
Name of Person in Charge M. L. Nugent
Position Plant Manager
Telephone No. (907) 776-8121 Alternate Telephone No. ( ) None

Facility Address or Vessel Port of Registration
Street Mile 21 Spur Highway County Kenai Peninsula Borough
City Kenai State AK Zip Code 99611

Dun and Bradstreet Number for Facility: 092876390

Facility/Vessel Location
Latitude Deg N 60 Min 40 Sec 22
Longitude Deg W 151 Min 22 Sec 36

Vessel LORAN Coordinates:

Part B. Population Information

Population Density
Choose the range that describes the population density within a one-mile radius of your facility or vessel (Indicate by placing an "X" in the appropriate blank below.)

X 0 - 50 persons	____ 101 - 500 persons	____ more than 1000 persons
____ 51 - 100 persons	____ 501 - 1000 persons	

Sensitive Populations and Ecosystems Within one Mile Radius

Sensitive Populations or Ecosystems (e.g., schools, hospitals, wetlands, wildlife preserves, etc.)	Distance and direction from facility
NONE	

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Fugitive Emissions – Valves, Pump Seals, Flanges

1. Indicate whether the release from this source is either:

   continuous without interruption _____X_____ **OR** routine, anticipated, intermittent _____

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considere continuous and stable in quantity and rate.*

   Ammonia and urea production.

   UN collectable vapors

3. Identify below how you established the pattern of release and calculated release estimates.

_____ Past release data	_____ Knowledge of the facility/vessel's operations and release history	_____ Engineering estimate
_____ AP-42 test	__X__ Best professional judgment (Cooling Towers)	__X__ Other (explain) EPA valves/seals emission factor

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Fugitive Emissions – Valves, Pump Seals, Flanges

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack__X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack**, indicate stack height: ____500,000__ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** _____ (stream _____, lake _____, or other _____)

- If the release affects any **surface water body**, give the name of the water body.

  _____

- If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: _____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:
  Inside diameter _____ feet or meters
  Gas Exit Velocity _____ feet/second or meters/seconds
  Gas Temperature _____ degrees Fahrenheit, Kelvin, or Celsius

- For a release to surface water, provide the following information, if available:
  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Fugitive Emissions – Valves, Pump Seals, Flanges

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	400	400	365	150,000	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* *Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.*

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Cooling Towers

1. Indicate whether the release from this source is either:

   continuous without interruption _____X_____ **OR** routine, anticipated, intermittent _____

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

   Urea and ammonia production.

3. Identify below how you established the pattern of release and calculated release estimates.

_____ Past release data	_____ Knowledge of the facility/vessel's operations and release history	__X__ Engineering estimate
_____ AP-42 test	__X__ Best professional judgment	_____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Cooling Towers

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack __X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack,** indicate stack height: ____3,600____ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** _____ (stream _____, lake ____, or other _____)

- If the release affects any **surface water body,** give the name of the water body.

  _____

- If the release affects a **stream,** give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake,** give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:
  Inside diameter _____ feet or meters
  Gas Exit Velocity _____ feet/second or meters/seconds
  Gas Temperature _____ degrees Fahrenheit, Kelvin, or Celsius

- For a release to surface water, provide the following information, if available:
  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number

44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Cooling Towers

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	80	0	365	1,460	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* *Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.*

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Fugitive Emissions – Urea Warehouse

1. Indicate whether the release from this source is either:

   continuous without interruption ____X____ **OR** routine, anticipated, intermittent _____

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

   Urea product storage.

   Urea evaporation while in Storage

3. Identify below how you established the pattern of release and calculated release estimates.

____ Past release data	____ Knowledge of the facility/vessel's operations and release history	_X_ Engineering estimate
____ AP-42 test	____ Best professional judgment	____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Fugitive Emissions – Urea Warehouse

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack__X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack,** indicate stack height: ____162,000__ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** _____ (stream _____, lake ____, or other _____)

- If the release affects any **surface water body,** give the name of the water body.

  _____

- If the release affects a **stream,** give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake,** give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:
  Inside diameter _____ feet or meters
  Gas Exit Velocity _____ feet/second or meters/seconds
  Gas Temperature _____ degrees Fahrenheit, Kelvin, or Celsius

- For a release to surface water, provide the following information, if available:
  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Fugitive Emissions – Urea Warehouse

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	100	10	365	7,300 *	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* *Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.*

* *Average ammonia loss is approx. 20 lb/day from both warehouses, based on laboratory analysis (SE-277-95) and 1996 total production.*